



Council Report

Report Number: CORP2024-003

Meeting Date: February 20, 2024

Title: **Fleet Capital Replacement- Two (2) Front End Wheel Loaders**

Description: Financing of two (2) Front End Wheel Loaders for 2024 Public Works Fleet Capital Budget

Author and Title: Carolyn Daynes, Treasurer
Rod Porter, Fleet Manager

Recommendation(s):

That Report COPR2024-003, **Fleet Capital Replacement- Two (2) Front End Wheel Loaders**, be received;

That capital projects 994230206-Landfill Compactors and 994230216-Excavators be closed and the balances of \$406,592.73 and \$428,476.26 (per Table 1) be returned to the Public Works Fleet Reserve;

That a new project be created for the purchase of Two (2) Front End Wheel Loaders with a total budget of \$802,000 funded from the Public Works Fleet Reserve.

Department Head: _____

Financial/Legal/HR/Other: _____

Chief Administrative Officer: _____

Background:

Two of the City's front end wheel loaders require capital replacement as per the Non-Emergency Fleet Policy which sets unit life cycle replacement at 15 years.

- One unit is currently assigned to the Solid Waste Division and is housed at the Somerville Landfill (L17)
- The second unit is assigned to Public Works Roads Division and is housed at the Coboconk Roads Depot (L23)

Both units have reached the end of their useful life and require replacement as their usage hours and repair costs continue to escalate.

The City's Fleet Division is entering the second year of a multi-year procurement/agreement with Toromont (CAT) for the supply and maintenance of construction/off road equipment. The requested front end wheel loaders described would qualify as a purchase under this agreement.

Equipment lead times vary, but based on last year's purchase, newly built loaders take approximately 12 to 18 months for delivery. Staff will explore the most feasible and appropriate equipment procurement.

This report addresses that two front end wheel loaders require capital replacement in alignment with the City's Non-Emergency Fleet Policy and accompanying Management Directive.

Rationale:

Regardless of care and maintenance on City equipment, it inevitably wears out over time. The construction industry standard for front end wheel loader replacement is between 10-12 years and the City has extended the life of these units to 15 years based on consistent maintenance, service and repair.

As equipment approaches and reaches its capital replacement date/end of life (15 years) the units become less reliable and require more frequent, costly repair and maintenance. The two front end wheel loaders scheduled for replacement have an average annual maintenance cost of between \$30,000 – \$45,000 versus a new unit with minimal maintenance costs (only fluids, filters and services). New units are under warranty and the City benefits from an extended warranty program with Toromont CAT for all its equipment. As these loaders age, the annual maintenance costs continue to

increase and above the average stated above at times. The most expensive maintenance period is the final 2-3 years of the unit's life.

Both units require significant repairs which have been postponed with the intention to replace the units before the repairs are completed. The mandatory repairs are outlined below and the required repairs would need to be completed if the units were to remain in service for an extended period. Pricing provided is high level and detailed price quotes will be required before any repair work is awarded. If the required repairs are not completed as a single repair project they would be addressed on an as needed basis i.e. when the component breaks it would be replaced/repared and this approach greatly impacts operations with parts delays, down time, and dismantling the machine various times.

L17 Mandatory Repairs

New Foam Filled Tires and Rims- \$32,000- \$43,000
Front Bucket Pins and Bushing- \$15,000- \$20,000
Front Bucket Replacement of Re-skin- \$7,000- \$32,000

L17 Required

Center Pin Pivot point line bore & Bearings- \$10,000- \$12,000
Wear Part Breaks, hydraulic Lines- \$10,000- \$12,000
Cab Refurbish- \$30,000
Engine & Transmission Refurbishment \$55,000- \$60,000

L23 Mandatory Repairs

Front Bucket Pins and Bushing- \$15,000- \$20,000
Wear Part Breaks, hydraulic Lines- \$10,000- \$12,000

L23 Required

Center Pin Pivot point line bore & Bearings- \$10,000- \$12,000
Cab Refurbish- \$30,000
Engine & Transmission Refurbishment \$55,000- \$60,000

The above costs would be allocated to the Fleet operating budget.

Other Alternatives Considered:

No alternatives were considered as the recommended procurement aligns with Council Policy and is the most efficient use of resources.

Alignment to Strategic Priorities

Healthy Environment

The Financing of two (2) Front End Wheel Loaders for 2024 Public Works Fleet Capital Budget directly aligns with the Healthy Environment Strategy under subsection 4) Develop and execute a Green City Charter, our corporate commitment to leadership in environmentally friendly business practices -Green Fleet program and practices.

New construction equipment supplied by Toromont (CAT) comes equipped with following green fleet features:

- The Cat® C7.1 engine meets U.S. EPA Tier 4 Final, EU Stage V and Korea Tier 5 emission standards. **(Reduced Emission)**
- Engine Idle Management System (EIMS) helps maximize fuel efficiency and **Reduce greenhouse gas emissions** while maintaining machine performance.
- Engine Idle Shutdown Timer **reduces fuel burn, greenhouse gas emissions** and unnecessary idle time by shutting down the machine after a pre-set idling period.
- Extended maintenance intervals not only reduce downtime but **decrease the amount of fluid and filters** that are replaced over the life of the machine.

Good Government

The Financing of two (2) Front End Wheel Loaders for 2024 Public Works Fleet Capital Budget directly aligns with the Good Government Strategy under subsection 1) Asset Management- Ensure municipal assets are well maintained and well managed. The acquisition of two new units will provide a reliable cost effective equipment solution for the divisions in which they are assigned.

Financial/Operation Impacts:

The capital replacement budgets are outlined below for each unit.

Landfill Front End Wheel Loader

Loader	365,700.00
Bucket & Attachments	<u>31,000.00</u>
Total	396,700.00
Payable Tax	<u>\$6,982.20</u>
Landfill Loader Total	\$ 403,682.20

Roads Front End Wheel Loader

Loader	365,700.00
Bucket & Attachments	<u>25,707.00</u>
Total	\$391,407.00
<u>Payable Tax</u>	<u>\$6,889.04</u>
Road Loader Total	\$398,296.04
Total Purchase Price	\$801,978.23

Table 1

Project Number	Description	Budget	Other Committed Funds	Total Spending	Project Balance
994230206	Landfill Compactors (1)	\$ 1,300,000.00	\$ 49,852.26	\$ 843,555.01	\$ 406,592.73
994230216	Excavators (2)	\$ 1,400,000.00		\$ 971,523.74	\$ 428,476.26
	Totals	\$ 2,700,000.00	\$ 49,852.26	\$ 1,815,078.75	\$ 835,068.99
	Request for Purchase of 2 Loaders				\$ 801,978.23
	Balance to remain in PW Fleet Reserve				\$ 33,090.76

Through the 2023 procurement process for construction equipment, there were two opportunities where Fleet, Public Works Operations and the Purchasing Division were able to source alternative and or refurbished units.

Savings and value were achieved which resulted in surplus/available funding remaining in two (2) projects:

- Project (1) 994230206- Landfill Compactor- Original Budget- 1,300,000.00. A Cat certified refurbished unit (with factory warranty) was purchased versus a brand new 2023 unit. The balance of funding on this project is \$ 406,592.73.
- Project (2) 994230216- Excavators- Original Budget- 1,400,000.00. Two (2) Cat rubber tired excavators were purchased versus Truck Mounted Gradalls resulting in significant capital cost reduction. The balance of funding on this project is \$428,476.26. Staff are requesting that those savings available be reallocated to support the purchase of the two (2) Front End Wheel Loaders.

Consultations:

Manager of Corporate Assets

Director of Public Works

Department Head email: sbeukeboom@kawarthalakes.ca

Department Head: Sara Beukeboom